

The Nutrient Utilization Plans

K.S.A. 2-3302. Definitions. As used in the Kansas chemigation safety law: (a) "Chemigation" means any process whereby pesticides, fertilizers or other chemicals or animal wastes are added to irrigation water applied to land or crops, or both, through an irrigation distribution system.

(b) "Board" means the secretary of agriculture.

(c) "Secretary" means the secretary of agriculture.

(d) "Operating chemigation equipment" for the purposes of this act shall include, but not be limited to:

(a) Preparing solution and filling the chemical supply container;

(b) calibrating of injection equipment;

(3) starting and stopping equipment when injection of chemicals is involved; and

(4) supervision of the chemigation equipment to assure its safe operation.

(e) "Anti-pollution devices" means mechanical equipment used to reduce hazard to the environment in cases of malfunction of the equipment during chemigation and includes but is not limited to interlock, waterline check valve, chemical line closure device, vacuum relief device and automatic low pressure drain.

(f) "Supervision" means the attention given to the chemigating system during its operation when chemicals are being applied.

(g) "Direct supervision" means supervision with ability to change the procedures.

(h) "Irrigation distribution system" means any device or combination of devices having a hose, pipe or other conduit which connects directly to any source of ground or surface water, through which water or a mixture of water and chemicals is drawn and applied to land. The term does not include any handheld hose sprayer or other similar device which is constructed so that an interruption in water flow automatically prevents any backflow to the water source. For the purpose of this act it does not include greenhouse irrigation or residence yards. Animal waste lagoons are not to be considered water sources.

(i) "Calibration device" means equipment of sufficient accuracy to determine the rate of chemical application.

(j) "Point of diversion" means:

(1) the point where the longitudinal axis of the dam crosses the center line of the stream in the case of a reservoir; or

(2) the location of the headgate or intake in the case of a direct diversion from a river, stream or other watercourse; or

(3) the location of a well in the case of groundwater diversion.

(k) "Agronomic application rates" means the method and amount of swine waste defined by the secretary that in the secretary's discretion best protects the environment, including consideration of the crops or soil to which swine waste may be applied and the economic impact associated with any application of swine waste.

(l) "Chemicals" shall include nutrients or the chemical composition of animal waste.

K.S.A. 2-3305. Functional anti-pollution devices, requirements. Functional anti-pollution devices shall be used in the chemigation process according to:

(a) Criteria adopted by the secretary by rules and regulations that, in the secretary's discretion, follow the latest scientific knowledge and technology and that is designed to protect the groundwater and surface water of the state; or

(b) the following criteria:

(1) Waterline check valve shall be an automatic, quick-closing device capable of preventing the backflow of water chemical mixtures into the source of water supply during times of system failure or equipment shutdown;

(2) a chemical injection line check valve shall be used to prevent flow of water from the irrigation system into the chemical supply tank and to prevent gravity flow from the chemical supply tank into the irrigation system;

(3) an interlock system shall be used between the power system of the injection unit, the irrigation pumping plant and the pivot, if involved; the interlock shall function so that if the irrigation pump stops, the injection pump will also stop;

(4) a functional vacuum relief device shall be used between the waterline check valve and the irrigation pump to reduce the chance of chemical being back-siphoned into the water source; and

(5) an automatic low pressure drain shall be used between the waterline valve and the irrigation pump.

K.S.A. 2-3309. Administration of act; employees; rules and regulations.

(a) The secretary of agriculture shall administer this act and have authority to employ such qualified persons deemed necessary to carry out the provisions of this act.

(b) The secretary shall adopt, within 60 days after the effective date of this act, such rules and regulations the

secretary deems necessary to carry out the provisions of this act.

K.S.A. 2-3318. Application of swine waste; authority of secretary; nutrient utilization plans, review and approval; penalties for violations. (a) Regardless of whether irrigation water is added, whenever swine waste is applied to crops or land, the secretary is authorized to investigate, inspect or conduct any manner of examination or review of the application of swine waste. No swine waste shall be applied to crops or land in excess of agronomic application rates.

(b) The secretary shall review and approve all nutrient utilization plans that provide for the application of swine waste to crops or land and that are submitted by swine confined feeding facilities pursuant to K.S.A. 65-1,182 and amendments thereto if the plans demonstrate that swine waste will be applied pursuant to agronomic application rates and include all required information. Nutrient utilization plans shall be submitted on a form required by the secretary. The secretary shall notify the secretary of health and environment when a nutrient utilization plan has been approved and whether the approval is conditioned on any amendments or revisions to the plan.

(c) Failure of the operator of a swine confined feeding facility to implement a nutrient utilization plan approved by the secretary shall be considered a violation of the Kansas chemigation safety law for which the secretary may suspend a permit pursuant to K.S.A. 2-3310 and amendments thereto or may impose a civil penalty pursuant to K.S.A. 2-3317 and amendments thereto, or both.

(d) This section shall be part of and supplemental to the Kansas chemigation safety law.

Chapter 65.--PUBLIC HEALTH

Article 1.--SECRETARY OF HEALTH AND ENVIRONMENT, ACTIVITIES

K.S.A. 65-1,182. Nutrient utilization plan; requirements for land application of manure or wastewater. (a) The department of health and environment shall not issue or renew a permit for any swine facility that has an animal unit capacity of 1,000 or more and that applies manure or wastewater to land unless:

- (1) The land application process complies with the applicable requirements of this section; and
- (2) the nutrient utilization plan required by this section is approved by the secretary of agriculture.

(b) (1) If the manure management plan prepared pursuant to K.S.A. 65-1,181 and amendments thereto provides for land application of manure or wastewater:

(A) The applicant for a permit for construction of a new swine facility or for expansion of an existing swine facility shall submit with the application for a permit a nutrient utilization plan on a form prescribed by the secretary of agriculture and shall comply with the plan when the permit is issued by the department of health and environment; and

(B) the operator of an existing swine facility shall submit to the department of health and environment, within six months after the rules and regulations implementing this act are adopted, a nutrient utilization plan on a form prescribed by the secretary of agriculture, for approval by the secretary of agriculture, and shall comply with the plan by a date established by the secretary of agriculture.

(2) Each nutrient utilization plan shall address site-specific conditions for land application of manure, wastewater and other nutrient sources, comply with the requirements of this section and contain, at minimum, the following:

- (A) A site map of all land application areas, including section, township and range;
 - (B) crop rotations on the land application areas;
 - (C) annual records of soil tests, manure nutrient analyses, and calculations required by subsection (c);
 - (D) nutrient budgets for the land application areas;
 - (E) rates, methods, frequency and timing of application of manure, wastewater and other nutrient sources to the land application areas;
 - (F) the amounts of nitrogen and phosphorus applied to the land application areas;
 - (G) precipitation records and the amounts of irrigation and other water applied;
 - (H) records of inspections and preventive maintenance of equipment required by subsection (f)(6);
 - (I) copies of all landowner agreements for land that is not owned by the swine facility and is scheduled to receive manure or wastewater;
 - (J) names of employees and contractors whom the operator of the swine facility has identified pursuant to subsection (f)(7) to supervise the process of transferring manure or wastewater to land application equipment and the process of land application;
 - (K) records of training of all personnel who supervise and conduct the land application of manure or wastewater, as required by subsection (f)(7); and
 - (L) any other information required by the secretary of agriculture to facilitate approval.
- (3) (A) A swine facility that is required to have a nutrient utilization plan shall amend such plan whenever

warranted by changes in the facility, soil test results or other conditions affecting the facility.

(B) Amendments to the nutrient utilization plan must be approved by the secretary of agriculture.

(4) A swine facility that is required to have a nutrient utilization plan shall maintain such plan in accordance with K.S.A. 65-1,185 and amendments thereto.

(c) (1) Each swine facility that has a manure management plan that includes land application of manure or wastewater shall:

(A) Conduct soil tests, including but not limited to tests for nitrogen, phosphate, chloride, copper and zinc, on the land application areas prior to preparation of the nutrient utilization plan and at least annually thereafter, or as often as required by best available soil science and standards relative to the soils of, and crops to be grown on, the land application areas or as required by the secretary of agriculture; and

(B) include the results of such tests in its nutrient utilization plan.

(2) Each swine facility that has a manure management plan that includes land application of manure or wastewater or sells or gives manure or wastewater to third persons pursuant to subsection (h) of K.S.A. 65-1,181 and amendments thereto shall:

(A) Conduct manure nutrient analyses of its manure and wastewater prior to preparation of its nutrient utilization plan and at least every two years thereafter; and

(B) include the results of such analyses in its nutrient utilization plan.

(3) Each swine facility that has a manure management plan that includes land application of manure or wastewater shall:

(A) Compare the manure nutrient analyses required by subsection (c)(2) with the soil tests required by subsection (c)(1) to calculate needed fertility and application rates for pasture production and crop target yields on the land application areas prior to the preparation of the nutrient utilization plan and each time thereafter when new soil tests or manure nutrient analyses are conducted; and

(B) include such calculations in the nutrient utilization plan.

(d) If a swine facility is required to have a nutrient utilization plan and finds that the soil tests required pursuant to this act indicate that the phosphorus holding capacity for any soils in the facility's land application areas may be exceeded within five years, the facility shall promptly initiate the process to obtain access to the additional land application areas needed, or make other adjustments, to achieve the capability to apply manure or wastewater at appropriate agronomic rates.

(e) The Kansas department of agriculture may require a swine facility that is required to have a nutrient utilization plan to apply manure or wastewater on all or a portion of the facility's land application areas at a rate within the agronomic phosphorus needs of the crops or pasture, or the soil phosphorus holding capacity, in less than the time originally allowed in the approved nutrient utilization plan if the department of agriculture finds that the land application actions of the facility are contributing to the impairment of groundwater or surface water.

(f) (1) Each swine facility that is required to have a nutrient utilization plan shall include in such plan, and thereafter comply with, the requirements that manure or wastewater shall not be applied on bare ground by any process, other than incorporation into the soil during the same day, within 1,000 feet of any habitable structure, wildlife refuge or city, county, state or federal park, unless:

(A) The manure or wastewater has been subjected to physical, biological or biochemical treatment or other treatment method for odor reduction approved by the department of health and environment;

(B) the manure or wastewater is applied with innovative treatment or application that is best available technology for swine facilities and best management practices for swine facilities or other technology approved by the department of health and environment; or

(C) the owner of the habitable structure has provided a written waiver to the facility.

(2) The separation distance requirements of subsection (f)(1) shall not apply to any structure constructed or park designated as a city, county, state or federal park after the effective date of this act, for swine facilities in existence on the effective date of this act, or any structure constructed or park designated as a city, county, state or federal park after submission of an application for a permit for a new swine facility or expansion of an existing swine facility.

(3) Swine facilities that are required to have a nutrient utilization plan shall not apply manure or wastewater:

(A) To lands classified as highly erodible according to the conservation compliance provisions of the federal food security act of 1985, as in effect on the effective date of this act, and classified as highly erodible on the basis of erosion resulting from water runoff, except where soil conservation practices to control erosion and runoff in compliance with the requirements of this section are identified in the facility's nutrient utilization plan and are followed by the facility;

(B) during rain storms, except where soil conservation practices to control erosion and runoff in compliance with the requirements of this section are identified in the facility's nutrient utilization plan and are followed by the facility;

(C) to frozen or saturated soil, except where soil conservation practices to control runoff in compliance with the requirements of this section are identified in the facility's nutrient utilization plan and are followed by the facility; and

(D) to any areas to which the separation distance requirements of subsection (f) apply.

(4) Swine facilities that are required to have a nutrient utilization plan shall follow procedures and precautions in the land application of manure or wastewater to prevent discharge of manure or wastewater to surface water and groundwater due to excess infiltration, penetration of drainage tile lines, introduction into tile inlets or surface runoff, including appropriate soil conservation practices to protect surface water from runoff carrying eroded soil and manure particles.

(5) Swine facilities that are required to have a nutrient utilization plan and that conduct wastewater irrigation shall:

(A) Employ measures to irrigate under conditions that reasonably prevent surface runoff; and

(B) use reasonable procedures and precautions to avoid spray drift from the land to which it is applied.

(6) Each swine facility that is required to have a nutrient utilization plan and that land applies manure or wastewater shall ensure that any equipment used in the land application process is properly maintained and calibrated and monitor the use of the equipment so that any malfunction that develops during the land application process is detected and the process ceases until the malfunction is corrected.

(7) The operator of each swine facility that is required to have a nutrient utilization plan and that land applies manure or wastewater shall:

(A) Identify, train and keep current the training of each employee and contractor who supervises the transfer of manure or wastewater to land application equipment and the conducting of land application activities; and

(B) train, and keep current the training of, all employees and contractors who conduct land application activities.

(g) Each swine facility that is required to have a nutrient utilization plan shall amend such plan whenever warranted by changes in conditions. The operator of the facility shall file such plan and any amendments to such plan with the department of health and environment and the department shall forward such plan and any amendments to the secretary of agriculture.

(h) The secretary of agriculture shall make a determination to approve or disapprove a nutrient utilization plan not later than 45 days after the plan is received from the department of health and environment.

History: L. 1998, ch. 143, § 6; L. 2004, ch. 101, § 194; July 1.

K.S.A. 74-568. State board of agriculture and secretary of the state board of agriculture abolished; transfer of powers and duties to the department of agriculture and secretary of agriculture. (a) The state board of agriculture created by K.S.A. 74-503, and amendments thereto, and the office of the secretary of the state board of agriculture created by K.S.A. 74-503, and amendments thereto, are hereby abolished.

(b) Except as otherwise provided by this act, all of the powers, duties and functions of the existing state board of agriculture and the existing secretary of the state board of agriculture are hereby transferred to and conferred and imposed upon, the department of agriculture and the secretary of agriculture established by this act.

(c) Except as otherwise provided by this act, the department of agriculture and the secretary of agriculture established by this act shall be the successor in every way to the powers, duties and functions of the state board of agriculture and the secretary of agriculture in which the same were vested prior to the effective date of this act. Every act performed in the exercise of such powers, duties and functions by or under the authority of the department of agriculture or the secretary of agriculture established by this act shall be deemed to have the same force and effect as if performed by the state board of agriculture or the secretary of the state board of agriculture, respectively, in which such powers, duties and functions were vested prior to the effective date of this act.

(d) Except as otherwise provided by this act, whenever the state board of agriculture, or words of the like effect, is referred to or designated by a statute, contract or other document, such reference or designation shall be deemed to apply to the secretary of agriculture established by this act.

(e) Except as otherwise provided by this act, whenever the secretary of the state board of agriculture, or words of like effect, is referred to or designated by a statute, contract or other document, such reference or designation shall be deemed to apply to the secretary of agriculture established by this act.

(f) All rules and regulations of the state board of agriculture or the secretary of the state board of agriculture in existence on the effective date of this act shall continue to be effective and shall be deemed to be duly adopted rules and regulations of the secretary of agriculture by this act until revised amended or nullified pursuant to law.

(g) All rules and regulations of the division of water resources of the state board of agriculture or the chief engineer of the division of water resources of the state board of agriculture in existence on the effective date of this act shall continue to be effective and shall be deemed to be duly adopted rules and regulations of the chief engineer of the division of water resources of the department of agriculture established by this act until revised, amended, revoked or nullified pursuant to law.

(h) All orders and directives of the state board of agriculture or the secretary of the state board of agriculture in existence in the effective date of this act shall continue to be effective and shall be deemed to be orders and directives of the secretary of agriculture established by this act, until revised, amended or nullified pursuant to law.

(i) On the effective date of this act, the secretary of agriculture shall succeed to whatever right, title or interest

the state board of agriculture has acquired in any real property in this state, and the secretary shall hold the same for and in the name of the state of Kansas. On and after the effective date of this act, whenever any statute, contract, deed or other document concerns the power or authority of the state board of agriculture or the secretary of the state board of agriculture to acquire, hold or dispose of real property or any interest therein, the secretary of agriculture shall succeed to such power or authority.

(j) The secretary of agriculture established by this act shall be continuations of the state board of agriculture and the secretary of the state board of agriculture.

KANSAS ADMINISTRATIVE REGULATIONS

Agency 4 – Kansas Department of Agriculture

Article 20. – CHEMIGATION

K.A.R. 4-20-11. Civil penalties. (a) The process for issuance and processing civil penalties shall follow the procedure established in K.A.R. 4-13-60 through 4-13-65, except for all of the following:

(1) The provision of K.A.R. 4-13-62(b) shall be replaced by the provisions of subsection (b) below.

(2) Any reference to the terms “state and federal pesticide laws” or “pesticide law” contained in K.A.R. 4-13-60 through 4-13-65 shall be replaced by the term “the Kansas chemigation safety law,” as the context requires.

(3) All references to the term “pesticide business licensee” shall be replaced by the term “person” or “swine facility,” as the context requires.

(b) The amount proposed for each civil penalty shall be within the ranges listed below:

(1) For each violation of K.S.A. 2-3305, and amendments thereto, the proposed civil penalty shall be not less than \$100 and not more than \$5,000.

(2) For each violation of K.S.A. 2-3308(a)(2), (a)(3), or (a)(4), and amendments thereto, the proposed civil penalty shall be not less than \$100 and not more than \$5,000.

(3) For each violation of K.S.A. 2-3313(a) or (b) or of K.S.A. 2-3313(f) or (i), and amendments thereto, the proposed civil penalty shall be not less than \$100 and not more than \$5,000.

(4) For each violation of K.S.A. 2-3308, and amendments thereto, not covered in paragraph (b)(2) above, the proposed civil penalty shall be not less than \$100 and not more than \$1,000.

(5) For each violation of K.S.A. 2-3313 not covered in paragraph (b)(3) above, the proposed civil penalty shall be not less than \$100 and not more than \$1,000.

(6) For each application of waste in violation of K.S.A. 2-3318, and amendments thereto, the proposed civil penalty shall be not less than \$100 and not more than \$5,000.

(c) For the second or any subsequent occurrence of a violation for which a civil penalty has been assessed within a three-year period, the civil penalty assessed for the second or subsequent violation shall be the maximum amount for the category listed. (Authorized by K.S.A. 2-3305 and K.S.A. 2-3309; implementing K.S.A. 2-3308 and 2-3317; effective March 26, 1990; amended, T-4-12-29-98, Jan. 1, 1999; amended April 23, 1999; amended April 4, 2003.)

K.A.R. 4-20-15. Agronomic application rates. The agronomic application rate for swine waste shall be the amount of waste required for plant nutrition and for the nutrient-holding capacity of the surfaces or soils to which swine waste is applied, as determined by sound agronomic methods. Sound agronomic application rates shall be determined in consultation with Kansas state university. Sound agronomic methods may include the rate derived from the calculations from the form prescribed by the secretary of agriculture in K.A.R. 4-21-1 and K.A.R. 4-21-7. (Authorized by K.S.A. 2-3305, K.S.A. 2-3309; implementing K.S.A. 2-3318, as amended by L. 2002, ch. 181, sec. 14 and K.S.A. 2001 Supp. 65-1,182; effective, T-4-12-29-98, Jan. 1, 1999; effective April 23, 1999; amended April 4, 2003.)

REGULATIONS REFERENCED IN K.A.R. 4-20-11

(Procedure for Processing Civil Penalties)

K.A.R. 4-13-60. Civil penalty; complaint. (a) Each complaint for the assessment of a civil penalty shall include:

(1) A statement reciting each subsection of the act authorizing the assessment of civil penalty;

(2) a specific reference to each provision of the act or implementing regulation which respondent is alleged to have violated;

(3) a concise statement of the factual basis for each violation alleged;

(4) the amount of the civil penalty which is proposed to be assessed; and

(5) the notice of respondent's right to request a hearing on any material fact contained in the complaint or on the appropriateness of the amount of the proposed civil penalty. This notice may be incorporated within the complaint or set forth in a separate document.

(b) Each respondent shall be served a notice of a pre-hearing conference in accordance with the Kansas administrative procedures act, K.S.A. 77-501 et seq.

K.A.R. 4-13-61. Answer to the complaint. (a) If a respondent contests any material fact upon which the complaint is based, contends that the amount of the civil penalty proposed in the complaint is inappropriate or contends that the respondent is entitled to judgment as a matter of law, the respondent may file a written answer to the complaint. If an answer is filed, the answer shall be filed with the designated hearing officer within 20 days after service of the complaint.

(b) If an answer is filed, the respondent's answer shall be in writing.

(1) The answer shall clearly and directly admit, deny or explain each of the factual allegations contained in the complaint to which the respondent has any knowledge.

(2) Where the respondent has no knowledge of a particular factual allegation and so states, the allegation shall be deemed denied.

(3) The answer shall also state any circumstances or arguments which are alleged to constitute grounds of defense, any facts which the respondent disputes and intends to place at issue and whether a hearing is requested.

K.A.R. 4-13-62. Amount of proposed civil penalty. (a) A separate civil penalty shall be assessed for each violation of the pesticide law which results from each independent act or failure to act by any pesticide business licensee or agent or employee thereof. In determining whether a given violation is independent of and substantially distinguishable from any other violation for the purpose of assessing separate civil penalties, consideration shall be given to whether each violation requires an element of proof not required by another violation. Where several violations require the same elements of proof and are not distinguishable, assessment of separate civil penalties shall be within the discretion of the secretary or the secretary's authorized representative.

(b) [See K.A.R. 4-20-11(b)]

(c) For each subsequent occurrence of a violation for which a civil penalty has been assessed within a three-year period, the civil penalty assessed for the subsequent violation shall be the maximum amount for the category listed.

K.A.R. 4-13-63. Criteria to determine dollar amount of proposed civil penalty. In determining the amount of any proposed civil penalty, the gravity of the violation shall be considered by the secretary or the secretary's designee. Factors to be considered shall include:

(a) The potential of the act to injure humans, pets, domestic animals, wildlife or the environment;

(b) the severity of potential injuries;

(c) the extent to which injury actually occurred;

(d) the respondent's history of compliance with state and federal pesticide laws and regulations promulgated thereunder;

(e) any action taken by respondent to remedy the specific violation or to mitigate any adverse health effects or environmental effects which were the result of the violation; and

(f) whether or not the violation involved any misrepresentation or fraud.

K.A.R. 4-13-64. Informal settlement. (a) The respondent may request a settlement conference. The request may be contained either in respondent's answer to the complaint, if an answer is filed, or presented at the pre-hearing conference.

(b) If a settlement is reached, the parties shall reduce the settlement to writing and present the proposed written consent agreement to the secretary or the secretary's designee. The consent agreement shall state that, for the purpose of the proceeding, respondent:

(1) Admits the jurisdictional allegations of the complaint;

(2) admits the facts stipulated in the consent agreement;

(3) neither admits nor denies specific factual allegations contained in the complaint; and

(4) consents to the assessment of a stated civil penalty. The consent agreement shall include any and all terms of the agreement and shall be signed by all parties or their counsel or representatives of record.

K.A.R. 4-13-65. Adjusting the amount of the proposed civil penalty. (a) Each respondent shall present all evidence on the issue of adjustment of the proposed civil penalty at the settlement conference. Such evidence may include mitigating factors or new evidence not previously known to the agency at the time the complaint was issued.

(b) Upon presentation by the respondent of new evidence establishing facts and circumstances that were unknown to the secretary at the time the complaint was issued and which relate to the gravity of the violation, a new civil penalty may be proposed.

(1) When these additional facts establish that respondent did not commit the violations charged, the complaint shall be dismissed.

(2) When the new evidence reveals additional charges should have been filed, a new complaint containing appropriate additional civil penalties may be filed.

(c) The burden shall be on the respondent to present evidence of any mitigating factors to support any requested reduction in the amount of proposed civil penalty. The amount of the civil penalty may be reduced if the reduction serves the public interest.

(d) The amount of a civil penalty shall not be reduced to less than \$100 per offense.

(1) Whether or not a proposed civil penalty is reduced lies within the sole discretion of the secretary or the secretary's designee.

(2) Reductions shall not occur unless evidence of mitigating factors has been presented by respondent.

KANSAS ADMINISTRATIVE REGULATIONS

Agency 4 – Kansas Department of Agriculture

Article 21. – NUTRIENT UTILIZATION PLANS

K.A.R. 4-21-1. "Nutrient utilization plan" defined; amendments to the plan; exceptions.

(a) A confined feeding facility for swine under Kansas law that has an animal unit capacity of 1,000 or more and whose waste is applied to land shall prepare a nutrient utilization plan for review by the secretary of agriculture. The plan shall be on a form prescribed by the secretary and shall be a plan that forecasts nutrient management from the date of submission through the next five years. The plan shall be updated annually, maintained at the office of the swine facility, along with the three previous years' versions of the records, and made available to the secretary of agriculture upon request.

(b) Whenever the term "waste" is referred to in article 21 of these regulations, it shall mean swine manure, swine wastewater, or swine manure and swine wastewater mixed together.

(c) Changes in conditions that warrant amendments requiring the secretary's approval to a facility's nutrient utilization plan shall include any of the following:

(1) A swine facility's permit is no longer valid, but the facility plans to seek a new permit.

(2) Additional land to which waste will be applied is not described in an approved plan.

(3) A procedure for waste application will be used that is not described in an approved plan.

(4) Land included in an approved nutrient utilization plan is no longer available for application as provided for in the approved nutrient utilization plan because legal authorization for land application no longer exists for that land.

(5) A phosphorus soil analysis result exceeds the phosphorus-holding capacity of the soil in a field as prescribed by K.A.R. 4-21-7.

(d) Swine facilities required by law to prepare nutrient utilization plans shall submit any other amendments necessary to facilitate approval as requested by the secretary of agriculture.

(e) Any amendment described in subsection (c) or subsection (d) of this regulation to the plan shall be submitted to the secretary of agriculture and approved by the secretary before the application of waste.

(f) "Swine facility" or "facility," as used in article 21 of these regulations, shall mean a confined feeding facility for swine under Kansas law that has an animal unit capacity of 1,000 or more and that applies manure or wastewater to land. (Authorized by K.S.A. 2-3309; implementing K.S.A. 2-3302, K.S.A. 2002 Supp. 2-3318 and K.S.A. 65-1,182; effective, T-4-12-29-98, Jan. 1, 1999; effective April 23, 1999; amended April 4, 2003.)

K.A.R. 4-21-3. Soil samples. (a)(1) The soil nutrient values may be determined either by analysis of a single composite of representative samples from a field or from the mathematical average of all the results from grid samples. Grid soil sampling is defined as a systematic method of sampling that separates the field into identified subunits with each subunit sampled separately. Each composite sample shall be representative, at the time it is taken, of the soils and of the nutrient values in the field from which the sample is taken.

(2) Each field where waste is to be applied shall be sampled before the application unless the field has been sampled in the preceding 12 months, but sampling shall not be required more frequently than annually unless required by the department due to elevated nutrient levels. The sampling shall consist of a representative number of soil cores from each field and shall be collected by either of the following methods:

(A) Two composite samples shall be collected from each field by separating the top six inches of each core

collected from the bottom of the core sample. If multiple cores are taken, all samples from the top six inches of soil shall be mixed together. This composite sample shall be tested for phosphorous, zinc, copper, nitrate-N, and chloride. The bottom segment of each soil core sample from six through 24 inches shall then be mixed together, and this composite sample shall be tested for nitrate-N and chloride.

(B) Two composite samples shall be collected by obtaining individual core samples. A composite sample to be tested for phosphorous, copper, and zinc shall be collected from the top six inches of the soil and mixed if multiple cores are collected. The second composite sample shall be tested for nitrate-N and chloride, and shall be collected by taking a core sample from the soil surface to a soil depth of 24 inches. If multiple cores are taken, the samples shall be mixed before testing.

(b) The owner or operator of each swine facility shall sample the soil within 60 days following any application of waste if the application is the result of an emergency waste disposal. Each individual who collects any soil sample to comply with these regulations shall certify the location and number of representative cores collected from the field.

(c) A copy of the certification of each field and the laboratory analysis of composite or grid soil sample shall be maintained in the office of the swine facility and made available to the secretary of agriculture or designee upon request. The certification required by this regulation shall be submitted on a form prescribed by the secretary.

(d) Samples shall be taken by the secretary of agriculture or designee if, at that individual's discretion, an inspection requires a sample. Each composite soil sample taken by the secretary of agriculture or designee shall be taken in the manner required by this regulation and by K.A.R. 4-21-4. A composite soil sample taken by the secretary of agriculture or designee shall be presumed to be representative of the field. Whether a sample is representative shall be within the sole discretion of the secretary of agriculture, and the secretary's determination of whether a sample is representative shall be final. (Authorized by K.S.A. 2-3305 and K.S.A. 2-3309; implementing K.S.A. 2-3318, as amended by L. 2002, ch. 181, sec. 14 and K.S.A. 2001 Supp. 65-1,182; effective, T-4-12-29-98, Jan. 1, 1999; effective April 23, 1999; amended April 4, 2003.)

K.A.R. 4-21-4. Soil tests. The composite soil samples from each field shall be analyzed for the nutrients specified in subsection (a) in the manner prescribed by this regulation.

(a) The analyses listed in this subsection shall follow the directions on the specified pages that are hereby adopted by reference from the north central regional research publication no. 221, "recommended chemical soil test procedures for the north central region," revised January 1998, as follows:

(1) The analysis for nitrate-N shall follow the directions on pages 17 through 19.

(2) The analysis for phosphorus shall follow the directions on pages 21 through 26. Calcareous soils shall follow the directions for the Olsen phosphorus test on pages 25 through 26. For noncalcareous soils, the analysis shall follow the directions for either the Bray and Kurtz P-1 analysis, on pages 21 through 22, or the Mehlich 3 analysis, on pages 23-24. Calcareous soil is defined as soil having a pH above 7.0 that effervesces when a solution of 3N (three normal) hydrochloric acid is added drop-wise to the sample.

(3) The analysis for copper shall follow the directions for diethylenetriaminepentaacetic acid (DTPA) extraction on pages 41 through 42.

(4) The analysis for chlorides shall follow the directions for the mercury (II) thiocyanate method on pages 49 through 50.

(5) The analysis for zinc shall follow the directions for DTPA extraction on pages 41 through 42.

(b) An analysis different from any analysis specified in this regulation may be used if the analysis is based on generally recognized sound agronomic interpretations and laboratory methods and is approved by the secretary of agriculture.

(c) The authorized representative for the laboratory at which the sample was analyzed shall certify that the sample was analyzed according to the applicable procedure set forth in this regulation and that the results of the analysis are an accurate analysis of the sample. The laboratory's certification shall show the date the sample was received, the date the sample was analyzed, the signature of the laboratory's authorized representative, and the results of the analysis for each chemical in each sample analyzed. (Authorized by K.S.A. 2-3305 and K.S.A. 2-3309; implementing K.S.A. 2-3318, as amended by L. 2002, ch. 181, sec. 14 and K.S.A. 2001 Supp. 65-1,182; effective, T-4-12-29-98, Jan. 1, 1999; effective April 23, 1999; amended April 4, 2003.)

K.A.R. 4-21-5. Agreements to apply waste. Each agreement for the application of waste on land owned by a person or persons other than the swine facility that is required to prepare a nutrient utilization plan shall be in writing. (Authorized by K.S.A. 2-3305 and K.S.A. 2-3309; implementing K.S.A. 2-3318, as amended by L. 2002, ch. 181, sec. 14 and K.S.A. 2001 Supp. 65-1,182; effective, T-4-12-29-98, Jan. 1, 1999; effective April 23, 1999; amended April 4, 2003.)

K.A.R. 4-21-6. Recordkeeping. (a) Each swine facility that is required to prepare a nutrient utilization plan shall keep records required by the law for the five years immediately preceding the date of the then-current inspection or

for the years the swine facility operates after January 1, 1999. The swine facility shall not be required to keep records required by these regulations for more than five years from the date of approval.

(b) Actual nutrient values of waste may be used if the analysis used to determine the values is based on generally recognized sound agronomic interpretations and laboratory methods. Book values that are generally recognized as based on sound agronomic calculations may be substituted for actual values in preparing a nutrient utilization plan except for soil nutrient contents that require assay.

(c) Only actual soil analysis values shall be used in the preparation of nutrient utilization plans.

(d) Each facility shall maintain the records required for that facility by K.A.R. 4-21-1 through K.A.R. 4-21-7, and K.A.R. 4-20-15 at the facility's site office. All records required to be kept by K.A.R. 4-21-1 through K.A.R. 4-21-7, and K.A.R. 4-20-15 shall be made available to the secretary of agriculture upon request. (Authorized by K.S.A. 2-3305 and K.S.A. 2-3309; implementing K.S.A. 2-3318, as amended by L. 2002, ch. 181, sec. 14 and K.S.A. 2001 Supp. 65-1,182; effective, T-4-12-29-98, Jan. 1, 1999; effective April 23, 1999; amended April 4, 2003.)

K.A.R. 4-21-7. Exceeding the agronomic rate for phosphorus-holding capacity. A phosphorus soil analysis, as required by the secretary, shall be deemed to exceed the agronomic rate for phosphorus-holding capacity of the soil in a field if any of the following conditions is met: (a) The average annual rainfall is less than or equal to 22 inches, all of the field has a slope of five percent or less, and the soil analysis result using the Bray and Kurtz P-1 or the Mehlich 3 analysis method for phosphorus ("P") for the field exceeds 200 ppm or exceeds 76 ppm of "P" using the Olsen analysis method, as adopted by reference in K.A.R. 4-21-4.

(b) The average annual rainfall is less than or equal to 22 inches, any part of the field has a slope of greater than five percent, and the soil analysis result using the Bray and Kurtz P-1 or the Mehlich 3 analysis method for "P" exceeds 150 ppm or exceeds 57 ppm of "P" using the Olsen analysis method.

(c) The average annual rainfall is greater than 22 inches but less than 30 inches, the slope for all of the field is less than five percent, and the soil analysis result using the Bray and Kurtz P-1 or Mehlich 3 analysis method for "P" for the field exceeds 150 ppm or exceeds 57 ppm of "P" using the Olsen analysis method.

(d) The average annual rainfall is greater than 22 inches but less than or equal to 30 inches, the slope of any part of the field is greater than five percent, and the soil analysis result using the Bray and Kurtz P-1 or Mehlich 3 analysis method for "P" for the field exceeds 100 ppm or exceeds 38 ppm of "P" using the Olsen analysis method.

(e) The average annual rainfall is greater than 30 inches, and the soil analysis result using the Bray and Kurtz P-1 or Mehlich 3 analysis method for "P" for the field exceeds 100 ppm or exceeds 38 ppm of "P" using the Olsen analysis method. (Authorized by K.S.A. 2-3309; implementing K.S.A. 2002 Supp. 2-3318 and K.S.A. 65-1,182; effective April 4, 2003.)

K.S.A. 74-568. State board of agriculture and secretary of the state board of agriculture abolished; transfer of power and duties to the department of agriculture and secretary of agriculture. (a) The state board of agriculture created by K.S.A. 74-503, and amendments thereto, and the office of the secretary of the state board of agriculture created by K.S.A. 74-503, and amendments thereto, are hereby abolished.

(b) Except as otherwise provided by this act, all of the powers, duties and functions of the existing state board of agriculture and the existing secretary of the state board of agriculture are hereby transferred to and conferred and imposed upon, the department of agriculture and the secretary of agriculture established by this act.

(c) Except as otherwise provided by this act, the department of agriculture and the secretary of agriculture established by this act shall be the successor in every way to the powers, duties and functions of the state board of agriculture and the secretary of agriculture in which the same were vested prior to the effective date of this act. Every act performed in the exercise of such powers, duties and functions by or under the authority of the department of agriculture or the secretary of agriculture established by this act shall be deemed to have the same force and effect as if performed by the state board of agriculture or the secretary of the state board of agriculture, respectively, in which such powers, duties and functions were vested prior to the effective date of this act.

(d) Except as otherwise provided by this act, whenever the state board of agriculture, or words of the like effect, is referred to or designated by a statute, contract or other document, such reference or designation shall be deemed to apply to the secretary of agriculture established by this act.

(e) Except as otherwise provided by this act, whenever the secretary of the state board of agriculture, or words of like effect, is referred to or designated by a statute, contract or other document, such reference or designation shall be deemed to apply to the secretary of agriculture established by this act.

(f) All rules and regulations of the state board of agriculture or the secretary of the state board of agriculture in existence on the effective date of this act shall continue to be effective and shall be deemed to be duly adopted rules and regulations of the secretary of agriculture by this act until revised, amended or nullified pursuant to law.

(g) All rules and regulations of the division of water resources of the state board of agriculture or the chief engineer of the division of water resources of the state board of agriculture in existence on the effective date of this act shall continue to be effective and shall be deemed to be duly adopted rules and regulations of the chief engineer of the division of water resources of the department of agriculture established by this act until revised, amended, revoked or nullified pursuant to law.

(h) All orders and directives of the state board of agriculture or the secretary of the state board of agriculture in

existence in the effective date of this act shall continue to be effective and shall be deemed to be orders and directives of the secretary of agriculture established by this act, until revised, amended or nullified pursuant to law.

(i) On the effective date of this act, the secretary of agriculture shall succeed to whatever right, title or interest the state board of agriculture has acquired in any real property in this state, and the secretary shall hold the same for and in the name of the state of Kansas. On and after the effective date of this act, whenever any statute, contract, deed or other document concerns the power or authority of the state board of agriculture or the secretary of the state board of agriculture to acquire, hold or dispose of real property or any interest therein, the secretary of agriculture shall succeed to such power or authority.

(j) The secretary of agriculture established by this act shall be continuations of the state board of agriculture and the secretary of the state board of agriculture.